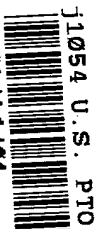


08/16/01



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PTO/SB/05 (08-00)

Approved for use through 10/31/2002 OMB 0651-0032
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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. **PF509P2**First Inventor **Betenbaugh et al.**Title **Engineering Intracellular Sialylation Pathways**

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

ADDRESS TO:Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification **[Total pages: 106]**
(preferred arrangement set forth below)
- Descriptive title of the Invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table,
or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) **[Total Sheets: 40]**
5. ☒ Oath or Declaration **[Total Pages 2]**
a. ☒ Unexecuted (original or copy)
b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 17 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in
the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer
Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
a. ☒ Computer Readable Form (CRF)
b. Specification Sequence Listing on:
i. ☐ CD-ROM or CD-R (2 copies); or
ii. ☒ paper (12 pages)
c. ☒ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet and document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement/ Form PTO/SB/08
☐ Copies of Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(should be specifically itemized)
15. ☐ Certified copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Other:

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,
or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No: ____ / ____
Prior application information: Examiner _____ Group/Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only. The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the
accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted
application parts.**18. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Label

22195

or ☐ Correspondence address below

NAME

ADDRESS

CITY

STATE

ZIP CODE

COUNTRY

TELEPHONE

FAX

NAME (Print/Type) Jonathan L. Klein

Registration No. (Attorney/Agent) 41,119

SIGNATURE

Date 8/16/01

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FEE TRANSMITTAL
for FY 2001

Patent fees are subject to annual revision.

Complete if Known

Application Number	Not assigned
Filing Date	Concurrently herewith
First Named Inventor	Betenbaugh et al.
Examiner Name	Not assigned
Group Art Unit	Not assigned
Attorney Docket Number	PF509P2

Total amount of payment (\$)**1,356.00**

METHOD OF PAYMENT (CHECK ONE)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account No. 08-3425

Deposit Account Name: Human Genome Sciences, Inc.

- ☒ Charge Any Additional Fee Required
Under 37 CFR §§ 1.16 and 1.17

- ☐ Applicant claims small entity status
See 37 CFR 1.27

2. ☐ Payment Enclosed:

☒ Check ☐ Credit Card ☐ Money Order ☒ Other*

*Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 08-3425

FEE CALCULATION

1. BASIC FILING FEE

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	710.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

Subtotal (1) \$ 710.00

2. EXTRA CLAIM FEES

Total claims	47	- 20**	Extra 27	Fee from below	Fee Paid \$ 486.00
Indep. claims	5	- 3**	2		\$ 160.00
Multiple Dependent					\$

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim
108	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

Subtotal (2) (\$)**1,356.00**

FEE CALCULATION (CONTINUED)

3. ADDITIONAL FEES
Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late provisional filing fee or cover sheet	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920	112	920	Requesting publication of SIR prior to Examiner action	
113	1,840	113	1,840	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive -unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Statement	
581	40	481	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	190	169	900	Request for expedited examination of a design application	

Other fee (specify):

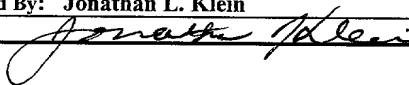
Other fee (specify):

*Reduced by Basic Filing Fee Paid

Subtotal (3)

\$

Submitted By: Jonathan L. Klein

Signature: 

Registration No.: 41,119

Telephone

301-309-8504

Date

8/16/01

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Betenbaugh et al.

Application No.: Not assigned

Group Art Unit: Not assigned

Filed: Concurrently herewith

Examiner: Not assigned

Title: **Engineering Intracellular Sialylation**

Pathways

Docket No. PF509P2

STATEMENT UNDER 37 C.F.R. 1.821(f)

Commissioner for Patents
Washington, D.C. 20231

Sir:

The undersigned attorney for applicants hereby states that the information contained in the paper copy of the sequence listing submitted herewith is identical to the information contained in the computer-readable form of the sequence listing submitted herewith.

Respectfully submitted,

Dated: August 16, 2001


Jonathan L. Klein (Reg. No. 41,119)
Attorney for Applicants

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9410 Key West Avenue
Rockville, MD 20850
(301) 251-6015 (phone)

JKE/DS/ur